

Application No.: 10/816,474

2

Docket No.: 590282000500

Amendments to the Specification:

Please replace paragraph [0037] with the following amended paragraph:

[0037] In one embodiment, the modules of the present invention use dynamic binding algorithms, such as those presented in related U.S. Patent Application No. [[____]] 10/769,154, entitled "Wrap Deformation Using Subdivision Surfaces". For example, in one embodiment a skeleton binds first to an intermediate object (referred to as a proxy model). The proxy model transfers deformations from the joints to the CG model's surfaces smoothly. Surfaces are bound to the proxy model dynamically, so that as the DDS enters a skin binding module it first finds an appropriate binding location on the proxy model; transformations are then applied according to the skeleton's joint movements. Should the surfaces in the DDS change on the fly, either because a similar character is being sent through the pipeline or because a change to the model has been made, the dynamic binding finds a new binding location on the proxy model. The relationship and setup of the CG skeleton to the proxy model are maintained, thus saving work by technical directors.

Please replace paragraph [0086] with the following amended paragraph:

[0086] The basis set of the local frame b_0, b_1, b_2 (FrameItem::basis[3]) describes the per-vertex system of coordinates where deformations get stored and, in some cases, evaluated. The deformation pipeline of the present invention does not necessarily require an orthogonal system of coordinates. In fact in the Cbinding module, described in related U.S. Patent Application No. [[____]] 10/769,154, entitled "Wrap Deformation Using Subdivision Surfaces", the vectors b_1, b_2 are not necessarily orthogonal in order to describe local shearing deformations of the vertex binding while b_0 is orthogonal to them.

Please replace paragraph [0094] with the following amended paragraph:

[0094] Related U.S. Patent Application No. [[____]] 10/769,154, entitled "Wrap Deformation Using Subdivision Surfaces", described a technique for wrap deforming arbitrary types of geometry using subdivision surfaces. Wrap deformation is a technique for deforming a geometry surface by using an auxiliary surface that "wraps" around the first. Generally the wrap surface is less detailed

sf-2101793

Application No.: 10/816,474

3

Docket No.: 590282000500

and resolved, and it is not uncommon to use polygonal meshes as wrap surfaces for this type of deformation.

sf-2101793